ABSTRACT OF THE INVENTION

A simulation template and method therefor is disclosed that modifies a SPICE netlist that describes a circuit in order to provide customized or pre-installed additional analysis. More specifically, a simulation template is an interactive command language (ICL) script that has embedded instructions telling a netlist where to insert information and which options are to be provided. It is used to expand SPICE beyond the traditional limitations of the basic alternating current (AC), direct current (DC), and transient analysis by allowing parameter variations and multiple simulations passes to be run under one analysis umbrella. Such additional analysis employing parameter variations and multiple analysis passes include sensitivity analysis, root means square (RSS) analysis, extreme value analysis (EVA) and worst case sensitivity (WCS), to name a few. The simulation template includes a routine to add to a netlist for altering circuit parameter values of the circuit design in a pre-determined manner, a routine to add to the netlist for performing simulations of the circuit design for respective altered circuit parameter values to arrive at respective selected vector measurements, and a routine to add to the netlist for manipulating at least one of the vector measurements in accordance with the pre-determined analysis.